

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Cancelled)

2. (Cancelled)

3. (Currently Amended) ~~[[The]]~~ A video decoding and displaying apparatus according to claim 1, wherein comprising:

a managing unit that partitions a frame memory into a plurality of sectors, wherein the frame memory stores decoded video data of a frame not used as a predicted video, the decoded video data including a top-field data and a bottom-field data;

a write control unit that writes the top-field data and the bottom-field data of the decoded video data into separate free sectors of the frame memory; and

a read control unit that, at the time of displaying decoded video data by reading it from the frame memory, simultaneously releases, during a last display field period of a display video, the sector that stores the top-field data and the sector that stores the bottom-field data when the sector capacity of the frame memory is equal to or greater than that required for one frame of video data to be displayed,

wherein ~~when~~ the decoded video data includes two video data of different picture sizes, and also when the sector capacity of the memory frame is less than that required for one frame of the video data of a larger picture size,

the read control unit releases one corresponding sector out of a sector that stores top-field data which has been read and a sector which stores bottom-field data during each display field period, in a reading and a displaying of the video data of the larger picture size, and

simultaneously releases the sector that stores top-field data and the sector that stores bottom-field data during a last display field period, in a reading and a displaying of the video data of a smaller picture size.

4. (Currently Amended) ~~[[The]]~~ A video decoding and displaying apparatus according to claim 1, wherein comprising:

a managing unit that partitions a frame memory into a plurality of sectors, wherein the frame memory stores decoded video data of a frame not used as a predicted video, the decoded video data including a top-field data and a bottom-field data;

a write control unit that writes the top-field data and the bottom-field data of the decoded video data into separate free sectors of the frame memory; and

a read control unit that, at the time of displaying decoded video data by reading it from the frame memory, simultaneously releases, during a last display field period of a display video, the sector that stores the top-field data and the sector that stores the bottom-field data when the sector capacity of the frame memory is equal to or greater than that required for one frame of video data to be displayed,

wherein the read control unit executes the release upon completing the reading of data corresponding to a number of written lines, when a value obtained by dividing a vertical pixel size of the video data by the number of storage lines of sectors that store the video data of a displayed frame becomes an odd number.

5. (Currently Amended) ~~[[The]]~~ A video decoding and displaying apparatus according to claim 1, wherein comprising:

a managing unit that partitions a frame memory into a plurality of sectors, wherein the frame memory stores decoded video data of a frame not used as a predicted video, the decoded video data including a top-field data and a bottom-field data;

a write control unit that writes the top-field data and the bottom-field data of the decoded video data into separate free sectors of the frame memory; and

a read control unit that, at the time of displaying decoded video data by reading it from the frame memory, simultaneously releases, during a last display field period of a display video, the sector that stores the top-field data and the sector that stores the bottom-field data when the sector capacity of the frame memory is equal to or greater than that required for one frame of video data to be displayed,

wherein when the decoded video data includes video data of a frame structure and video data of a field structure, the read control unit simultaneously releases the sector that stores top-field data and the sector that stores bottom-field data during a last display field period, in a reading and a displaying of the video data of the frame structure, and releases one corresponding sector out of the sector that stores top-field data which has been read and the sector which stores bottom-field

data during each display field period, in a reading and a displaying of the video data of the field structure.

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) ~~[[The]]~~ A video decoding and displaying apparatus according to ~~claim 1~~, further comprising:

a managing unit that partitions a frame memory into a plurality of sectors, wherein the frame memory stores decoded video data of a frame not used as a predicted video, the decoded video data including a top-field data and a bottom-field data;

a write control unit that writes the top-field data and the bottom-field data of the decoded video data into separate free sectors of the frame memory;

a read control unit that, at the time of displaying decoded video data by reading it from the frame memory, simultaneously releases, during a last display field period of a display video, the sector that stores the top-field data and the sector that stores the bottom-field data when the sector capacity of the frame memory is equal to or greater than that required for one frame of video data to be displayed,

an attribute holding unit that holds an attribute of the decoded video data of a frame not used as a predictive video;

a release mode generating unit that receives a setting of a dynamic mapping mode, refers to the attribute held in the attribute holding unit, and generates a sector

release signal for assigning one of a one-sector release mode for releasing one sector and a two-sector release mode for releasing two sectors; and

a control unit that controls the release of sectors, following the sector release mode signal.

9. (Currently Amended) ~~[[The]]~~ A video decoding and displaying apparatus according to claim 1, further comprising:

a managing unit that partitions a frame memory into a plurality of sectors, wherein the frame memory stores decoded video data of a frame not used as a predicted video, the decoded video data including a top-field data and a bottom-field data;

a write control unit that writes the top-field data and the bottom-field data of the decoded video data into separate free sectors of the frame memory;

a read control unit that, at the time of displaying decoded video data by reading it from the frame memory, simultaneously releases, during a last display field period of a display video, the sector that stores the top-field data and the sector that stores the bottom-field data when the sector capacity of the frame memory is equal to or greater than that required for one frame of video data to be displayed,

an attribute holding unit that holds attributes of the decoded video data for two kinds of frames that are used as a predictive video during a normal reproduction;

a switching unit that switches over a storage state in the frame memory, based on the attribute in the attribute holding unit, at the time of shifting a reproduction from a normal reproduction to an inverse reproduction;

a release mode generating unit that receives a setting of a dynamic mapping mode, refers to the attribute in the attribute holding, and generates a sector release signal for assigning one of a one-sector release mode for releasing one sector and a two-sector release mode for releasing two sectors; and

a control unit that controls the release of the sectors, following the sector release mode signal.

10. (Cancelled)